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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,242	11/09/2001	Victoria E. Milton	209332	6648

23460 7590 07/15/2004

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CHICAGO, IL 60601-6780

EXAMINER

BONSHOCK, DENNIS G

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,242

Applicant(s)

MILTON ET AL.

Examiner

Dennis G. Bonshock

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-17-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 15-29, and 33-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Understanding Universal Plug and Play, hereinafter MS and XML Schema Part 0: Primer, hereinafter W3C.

3. With regard to claim 1, MS teaches, on page 1, paragraphs 1-4 and page 11, paragraph 4, the use of Universal Plug and play for providing a user with a set of device descriptions and list of associated device services, which allow for selective retrieval of service descriptions, and allow for invoking the actions. MS further teaches, on page 16, paragraph 4, the use of the XML Schema as defined by W3C, but doesn't teach information organized into categories. W3C teaches the XML Schema as used by MS, but further teaches, on page 23, paragraph 3, that the XML Schema enables groups of elements (categories) be defined and named. It would have been obvious to one of ordinary skill in the art, having the teachings of MS and W3C before him at the time the invention was made to modify the UPnP of MS to include the grouping of elements as did W3C. One would have been motivated to make such a combination because this allows for like elements to be partitioned for use alone, and away from the rest of the group.

4. With regard to claims 2, 8, 16, 24, 34, 40, which teach the information presentation appliance conforming to a Universal Plug and Play device architecture, MS, further teaches, on page 1, paragraphs 1-4, the use of the Universal Plug and Play architecture.
5. With regard to claims 3, 9, 20, 28, 36, 42, which teach the markup language being text based, MS, further teaches, on page 11, paragraph 2, the use of XML which is known in the art to be a text based markup language (see attached definition).
6. With regard to claim 4, 21, 34, 37, which teaches the markup language identifies an element with a tag, and wherein the tag is defined in a schema, MS, further teaches, on page 11, paragraph 2, the use of XML which is known in the art to allow for custom tags to offer greater flexibility in organizing and presenting information (see attached definition).
7. With regard to claims 5, 10, which teach information presented by the information presentation appliance is and audio information, MS further teaches, on page 1, paragraph 5, the use of UPnP for audio/video entertainment.
8. With regard to claims 6, 11, which teach the information presented by the information presentation appliance is video information, MS further teaches, on page 1, paragraph 5, the use of UPnP for audio/video entertainment.
9. With regard to claim 7, MS teaches, on page 1, paragraphs 1-4 and page 11, paragraph 4, the use of Universal Plug and Play for providing a user with a set of device descriptions, each conveying its capabilities, and list of associated device services, which allow for selective retrieval of service descriptions, and allow for invoking the

actions. MS further teaches, on page 16, paragraph 4, the use of the XML Schema as defined by W3C, but doesn't teach information organized into categories. W3C teaches the XML Schema as used by MS, but further teaches, on page 23, paragraph 3, that the XML Schema enables groups of elements (categories) be defined and named. It would have been obvious to one of ordinary skill in the art, having the teachings of MS and W3C before him at the time the invention was made to modify the UPnP of MS to include the grouping of elements, as did W3C. One would have been motivated to make such a combination because this allows for like elements to be partitioned for use alone, and away from the rest of the group.

10. With regard to claim 15, MS teaches, on page 1, paragraphs 1-4 and page 11, paragraph 4, the use of Universal Plug and play for providing a user with a set of device descriptions and list of associated device services, which allow for selective retrieval of service descriptions, and allow for invoking the actions. MS further teaches on page 20, paragraph 2, the user being able to control, implying some sort of input device. MS further teaches, on page 16, paragraph 4, the use of the XML Schema as defined by W3C, but doesn't teach information organized into categories. W3C teaches the XML Schema as used by MS, but further teaches, on page 23, paragraph 3, that the XML Schema enables groups of elements (categories) be defined and named. It would have been obvious to one of ordinary skill in the art, having the teachings of MS and W3C before him at the time the invention was made to modify the UPnP of MS to include the grouping of elements, as did W3C. One would have been motivated to make such a

combination because this allows for like elements to be partitioned for use alone, and away from the rest of the group.

11. With regard to claims 17, 25, 35, 41, which teach the information presentation appliance is an electronic picture frame, MS further teaches, on page 1, paragraph 4, the user of UPnP in electronic imaging.

12. With regard to claims, 18 and 26, which teach the information presentation appliance being a speaker, MS further teaches, on page 1, paragraph 5, the use of UPnP for audio/video entertainment.

13. With regard to claims 19 and 27, which teach the information presentation appliance is a decoder device, MS further teaches, on page 1, paragraph 4, the use of UPnP in intelligent appliances, and PCs of all form factors.

14. With regard to claims 22 and 38, which teach the categories of information in the device description page are identified with extended tags, and wherein the extended tags are defined in an extended schema, MS, further teaches, on page 11, paragraph 2, the use of XML which is known in the art to allow for custom tags to offer greater flexibility in organizing and presenting information (see attached definition).

15. With regard to claim 23, MS teaches, on page 1, paragraphs 1-4 and page 11, paragraph 4, the use of Universal Plug and Play for providing a user with a set of device descriptions, each conveying its capabilities, and list of associated device services, which allow for selective retrieval of service descriptions, and allow for invoking the actions. MS further teaches on page 20, paragraph 2, the user being able to control, implying some sort of input device. MS further teaches, on page 16, paragraph 4, the

use of the XML Schema as defined by W3C, but doesn't teach information organized into categories. W3C teaches the XML Schema as used by MS, but further teaches, on page 23, paragraph 3, that the XML Schema enables groups of elements (categories) be defined and named. It would have been obvious to one of ordinary skill in the art, having the teachings of MS and W3C before him at the time the invention was made to modify the UPnP of MS to include the grouping of elements, as did W3C. One would have been motivated to make such a combination because this allows for like elements to be partitioned for use alone, and away from the rest of the group.

16. With regard to claims 29 and 43, which teach the available categories of information include the selected categories of information, W3C teaches, on page 23, paragraph 3, the XML Schema enabling groups of elements to be defined and given a name, where the available categories are made available by the peers of the peer to peer sharing system of MS.

17. With regard to claim 33, MS teaches, on page 1, paragraphs 1-4 and page 11, paragraph 4, the use of Universal Plug and play for providing a user with a set of device descriptions and list of associated device services, which allow for selective retrieval of service descriptions, and allow for invoking the actions. MS further teaches, on page 16, paragraph 4, the use of the XML Schema as defined by W3C, but doesn't teach information organized into categories. W3C teaches the XML Schema as used by MS, but further teaches, on page 23, paragraph 3, that the XML Schema enables groups of elements (categories) be defined and named. It would have been obvious to one of ordinary skill in the art, having the teachings of MS and W3C before him at the time the

invention was made to modify the UPnP of MS to include the grouping of elements, as did W3C. One would have been motivated to make such a combination because this allows for like elements to be partitioned for use alone, and away from the rest of the group.

18. With regard to claim 39, MS teaches, on page 1, paragraphs 1-4 and page 11, paragraph 4, the use of Universal Plug and Play for providing a user with a set of device descriptions, each conveying its capabilities, and list of associated device services, which allow for selective retrieval of service descriptions, and allow for invoking the actions. MS further teaches, on page 16, paragraph 4, the use of the XML Schema as defined by W3C, but doesn't teach information organized into categories. W3C teaches the XML Schema as used by MS, but further teaches, on page 23, paragraph 3, that the XML Schema enables groups of elements (categories) be defined and named. It would have been obvious to one of ordinary skill in the art, having the teachings of MS and W3C before him at the time the invention was made to modify the UPnP of MS to include the grouping of elements, as did W3C. One would have been motivated to make such a combination because this allows for like elements to be partitioned for use alone, and away from the rest of the group.

19. Claims 12-14, 30-32, and 44-46, are rejected under 35 U.S.C. 103(a) as being unpatentable over MS, W3C, and Dubal et al., Patent #6,711,630, hereinafter Dubal.

20. With regard to claims 12, 30, and 44, MS and W3C teach the UPnP system using XML groupings as discussed above, but fail to disclose using pointers to access the service description information. Dubal teaches, in column 1, line 65 through column 2,

line 11, a system for providing plug and play functionality in an audio and video system, similar to that of MS and W3C, but further teaches the use of a pointer to the device object. It would have been obvious to one of ordinary skill in the art, having the teachings of MS, W3C, and Dubal, before him at the time the invention was made to modify UPnP of MS and W3C, to include the functionality of a pointer system in accessing select categories of information. One would have been motivated to make such a combination because pointers, variables that contain memory locations, are an efficient means of accessing data.

21. With regard to claims 13, 31, and 45, MS and W3C teach the UPnP system using XML groupings as discussed above, but fail to disclose using pointers to a list function to access the service description information. Dubal teaches, in column 1, line 65 through column 2, line 11, a system for providing plug and play functionality in an audio and video system, similar to that of MS and W3C, but further teaches the use of a pointer to a list to the device object. It would have been obvious to one of ordinary skill in the art, having the teachings of MS, W3C, and Dubal, before him at the time the invention was made to modify UPnP of MS and W3C, to include the functionality of a pointer system in accessing select categories of information. One would have been motivated to make such a combination because connecting nodes by pointers is an efficient means of accessing data.

22. With regard to claims 14, 32, and 46, MS and W3C teach the UPnP system using XML groupings, that have associated names as discussed above, but fail to disclose using pointers to a list function to access the service description information. Dubal

teaches, in column 1, line 65 through column 2, line 11, a system for providing plug and play functionality in an audio and video system, similar to that of MS and W3C, but further teaches the use of a pointer to a list to the device object. It would have been obvious to one of ordinary skill in the art, having the teachings of MS, W3C, and Dubal, before him at the time the invention was made to modify UPnP of MS and W3C, to include the functionality of a pointer system in accessing select categories of information. One would have been motivated to make such a combination because connecting nodes by pointers (a linked list) is an efficient means of accessing data.

Conclusion

23. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach systems providing a plug and play architecture.

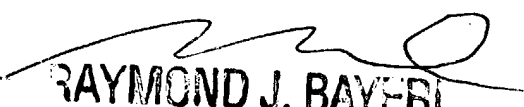
24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis G. Bonshock whose telephone number is (703) 305-4668. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2173

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dgb


RAYMOND J. BAYER
PRIMARY EXAMINER
ART UNIT 2173